



Berg et al.

45 Date of Parent: Oct. 19, 1999

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|------|--|-----------|--------|-----------------|-----------|
| [54] | VOICE COMMAND AND CONTROL
MEDICAL CARE SYSTEM | 5,267,222 | 12,800 | Kennedy | 754,272 |
| | | 5,333,148 | 41,004 | Matteson et al. | 846,213 |
| | | 5,354,885 | 42,704 | Dugan | 892,134 |
| [55] | INTELEX: Arthur Braun, Youngstown, Ohio;
Kenneth Mendel, Elton: Chy, Md;
R. J. Brown | 5,348,558 | | | |
| | | 5,417,210 | 51,791 | Pattis et al. | 1,283,611 |
| | | 5,474,426 | 42,799 | McIntosh et al. | 1,292,543 |

OTHER PUBLICATIONS

Newsweek news segment on Channel 25 WFLZ-TV on Oct. 24, 1974 including an interview with Dr. DeRosa, one of the inventors. Dr. DeRosa demonstrated the use of voice-controlled surgical equipment during eye surgery. A videotape copy of the news broadcast and a transcript prepared by the undersigned is available upon the Examiner's request.

"Voice Assisted Surgery", Second International Symposium on Medical Robotics and Computer Assisted Surgery, Nov. 5-7, 1993; Baltimore, Maryland.

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Attorney at Law of Firm—Richard Adams, Bardo &
Gustaf, LLP

[5] ABSTRACT

A value command and control medical care system is provided which comprises a processor having a continuous speech recognition capability. The processor is programmed to process a user's conversational speech to identify valid command words and to generate control signals for operating medical equipment in accordance with the commands. The processor is programmed to generate periodic messages reporting status information, and to request, and to generate acknowledgment messages and such communications between the user and the command. The system is comparable to interaction with and control via voice of a vehicle, essentially any piece of medical equipment having instruments and controls, and which can be controlled via electrical or electromagnetic signals.

46 Claims, 11 Drawing Sheets

References Cited

U.S. PATENT DOCUMENTS

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4,377,711	57,558	Nature	104.75
4,307,111	57,199	Zeus	104.75
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4,086,253	56,881	Liang et al.	18.75
3,645,777	57,071	Coman	154.511.1
3,647,703	57,391	Maria et al.	584.25
3,181,253	56,453	Griffith	128.75
3,072,852	56,793	Carlson et al.	26.75
3,011,476	57,072	Condit et al.	704.75
2,968,514	57,093	Harvey	104.75

